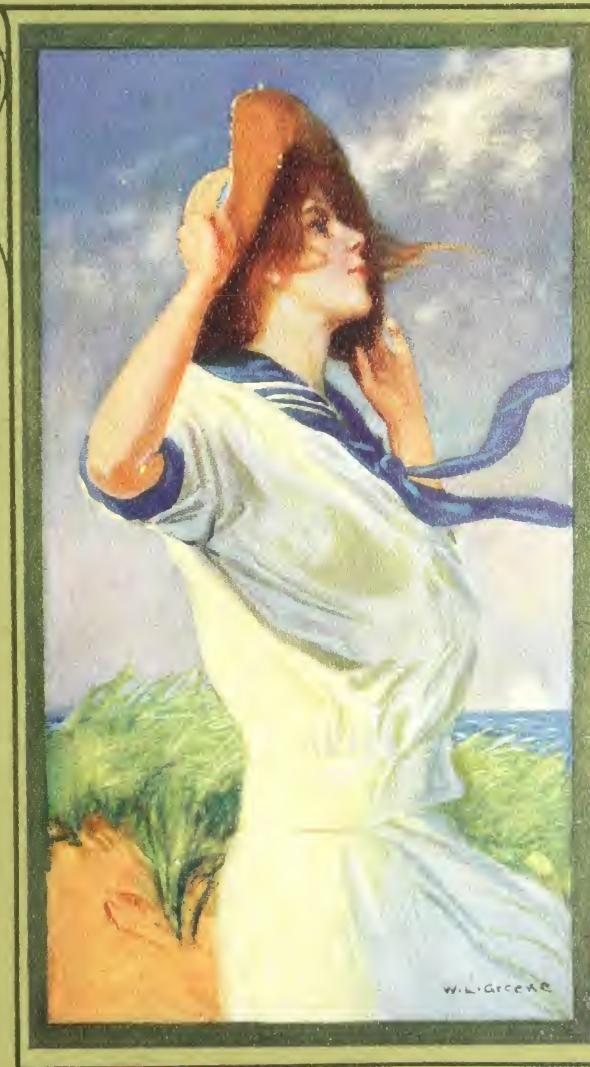
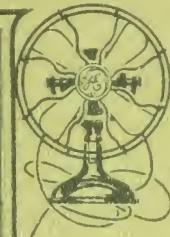


A 497

# ELECTRIC FANS



1914  
GENERAL ELECTRIC COMPANY  
SCHENECTADY, N.Y.



# ELECTRIC FANS



GENERAL ELECTRIC COMPANY  
SUPPLY DEPARTMENT

JANUARY 1914

BULLETIN NO. A4197

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\* Not made for alternating current.

## I N T R O D U C T I O N



WENTY years ago the GENERAL ELECTRIC COMPANY placed upon the market the first commercially successful type of electric fan.

Each successive year has witnessed improvements in design and refinements in manufacture so that after two decades of engineering experience the Company is offering to the trade the latest and most improved development in fan apparatus.

¶ The following pages will, it is hoped, furnish convincing evidence that the GENERAL ELECTRIC COMPANY has anticipated the popular market demand and provided a fan to meet every need and desire.

¶ The object of this catalogue is to place before our customers, both old and prospective, sufficient information to enable them to order correctly. Technical information has purposely been omitted. Catalogue numbers are provided for each style and rating of motor and should invariably be used to facilitate identification.

## NEW DESIGNS

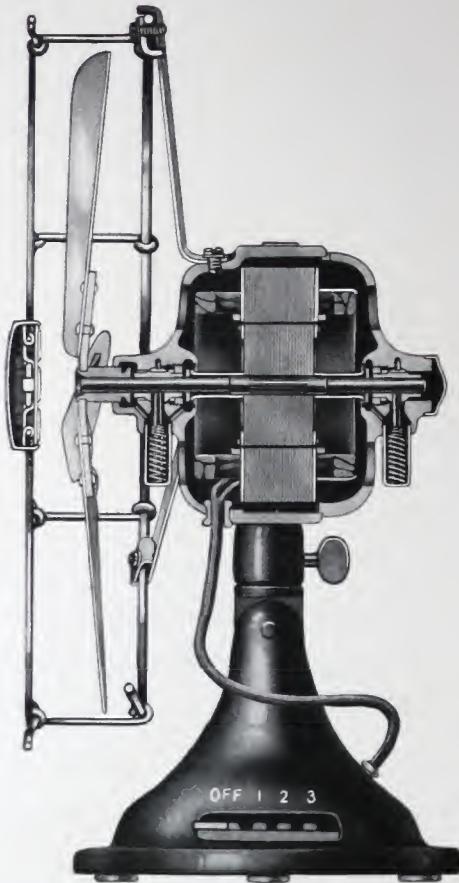
The line of GENERAL ELECTRIC FAN MOTORS for the season of 1914 comprises types not heretofore listed. The strong demand of the trade has made necessary the development of the 32-inch ceiling fans and the Navy fan. The 12-inch alternating and direct current desk-bracket fans have been greatly reduced in size and weight without sacrifice in output or efficiency. Distinctive features of design are maintained.

## ALTERNATING CURRENT FANS

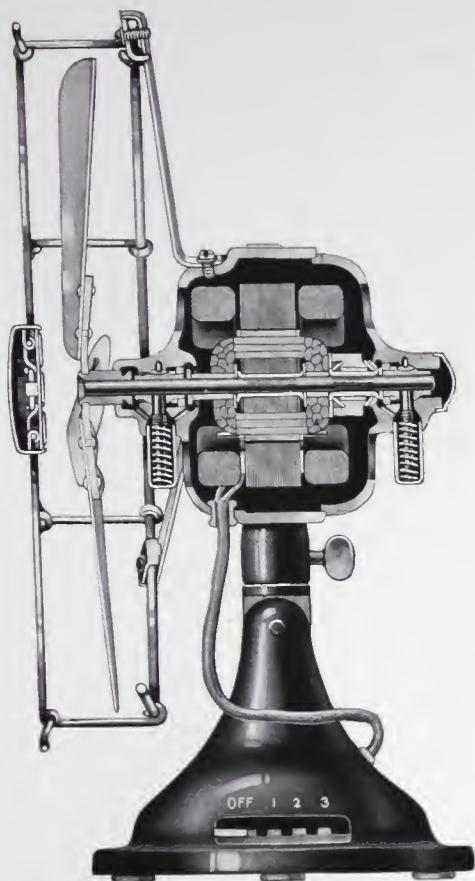
It is a notable fact that the electrical design adopted for all General Electric alternating current fan motors is one which avoids the necessity of sliding contacts or other automatic features. This fact alone insures quiet operation, long life and highly satisfactory operating characteristics. The rotor and stator are built up of electrical sheet steel stampings and accurately ground to size, thereby insuring a uniform air gap. The rotor carries no insulated windings, while the stator receives a series of coils carefully insulated and securely wedged in place. Shafts are made from special high grade machinery steel and carefully ground to size, while the bearing linings are produced from high grade bronze. All bearings are automatically lubricated. Oil-returns are provided to prevent oil throwing. The fan blades are designed upon exact mathematical principles, and the angles are carefully determined to give the greatest possible displacement of air for the power expended. Speed-control is obtained by means of a lever switch in the base of the motor. The accompanying illustrations show the internal construction, which is substantially the same for all alternating current motors.

## DIRECT CURRENT FANS

The direct current fan motor embodies many of the mechanical features found in the alternating current motor. The armature is of the drum type and built up of selected soft steel laminations, while the field is of the conventional bi-polar design with well insulated windings. The commutator segments are made from high grade hard drawn copper and carefully insulated from the shell and from one another by selected mica gauged to a uniform thick-



Section of Twelve-Inch Alternating Current Fan



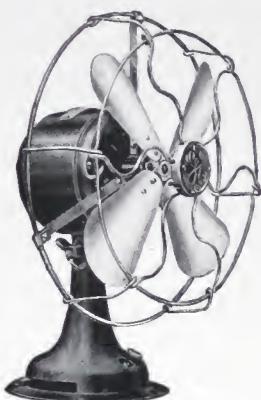
Section of Twelve-Inch Direct Current Fan

can be conveniently accomplished while the fan is in operation and provides a ready means for regulating the angle of oscillation and for instantly stopping the oscillating movement in case it is desired. The entire mechanism is packed in a high grade non-fluid oil which requires renewal but once a season. The amount of energy consumed is negligible. All oscillating fans can be adapted to wall mounting without the use of tools and with the same ease as obtains in the case of the non-oscillating motor. A feature which is both distinctive and novel is found in the addition of carrying handle clearly shown in the illustrations.

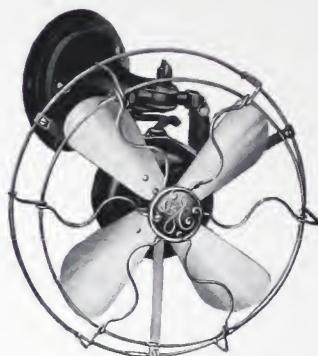
#### EFFICIENCY OF MANUFACTURE

High grade materials, proven designs and a highly efficient manufacturing organization built upon long years of experience are a strong guarantee of quality. Every component part of the fan is carefully inspected during the various processes of manufacture, while the finished product is inspected by a specialist before being sent to the shipping room.

EIGHT-INCH FANS—ALTERNATING AND DIRECT CURRENT



Alternating Current  
Desk-Bracket Fan



Telephone Booth Fan



Alternating Current Fan  
Bracket Mounting



Alternating Current Oscillating  
Fan, Bracket Mounting



Direct Current  
Desk-Bracket Fan



Alternating Current  
Oscillating Fan



Direct Current  
Oscillating Fan



Direct Current Oscillating  
Fan, Bracket Mounting

## EIGHT-INCH FANS—ALTERNATING AND DIRECT CURRENT

The eight-inch drawn-frame fans are continued for the season of 1914. This construction is especially durable and combines minimum weight with great strength. They are not mere toys since they possess all important features of design which characterize the larger fans. This fan has a hinged mounting only. The swivel feature is omitted because of the extreme lightness of the fan. Details of construction, inspection, and test receive just as careful attention as the more powerful, higher priced fans.

## TELEPHONE BOOTH

Ventilation of the telephone booth during the summer season is effectively accomplished by a simple adaptation of the eight-inch fan motor. The small fan body suspended on coil springs from a special mounting fulfills every requirement of the service—noiseless operation, gentle breeze, no vibration, and minimum current consumption.

## SPECIFICATIONS

**ADJUSTMENT.** Hinged joint for desk-bracket fans. Swivel joint for telephone booth fans.

**SPEEDS.** Three operating speeds with "off" position.

**SWITCH.** Improved lever design with notched guide insuring positive setting for each speed.

**FINISH.** Motor body and base finished in marine lacquer. Double ring brass guard and four-blade brass fan dipped and lacquered.

## DESK-BRACKET AND TELEPHONE BOOTH FANS

## FOR ALTERNATING CURRENT

CAT. NO.	Desk- Bracket	Telephone Booth	Cycles	Volts	Watts at Fast Speed	Speed
	* 76373	* 76374	25	110	20	1350
	75955	75952	40	120	33	1900
	78707	78711	50	100	25	1350
	78708	78712	50	110	25	1350
	78709	78713	50	200	27	1300
	78710	78714	50	220	27	1300
	75956	75953	60	110	25	1540
	75957	75954	60	220	30	1540

## FOR DIRECT CURRENT

75960	75958	..	110	18	1600
75961	75959	..	220	18	1600

## OSCILLATING FANS

## FOR ALTERNATING CURRENT

Cat. No.	Desk- Bracket	Cycles	Volts	Watts at Fast Speed	Speed
	* 78780	25	110	23	1350
	78781	40	120	36	1900
	78782	50	100	28	1350
	78783	50	110	28	1350
	78784	50	200	30	1300
	78785	50	220	30	1300
	78786	60	110	28	1540
	78787	60	220	33	1540

## FOR DIRECT CURRENT

78792	..	110	20	1600
78793	..	220	20	1600

\* Built in series commutating type only.

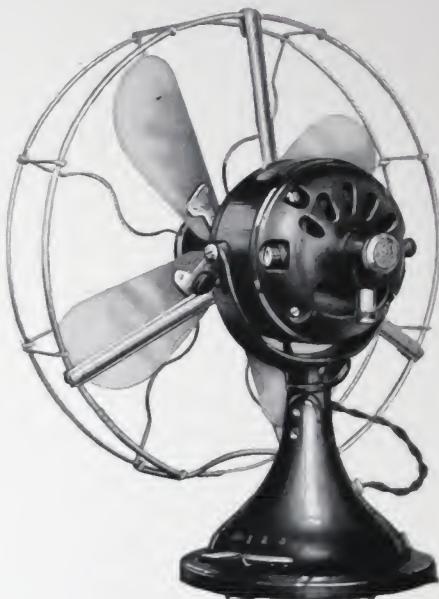
Order by catalogue number.

For weights see page 33.

TWELVE-INCH AND SIXTEEN-INCH ALTERNATING AND DIRECT CURRENT DESK-BRACKET FANS



Alternating Current Fan  
Bracket Mounting



Direct Current  
Desk-Bracket Fan



Alternating Current  
Desk-Bracket Fan



Direct Current Fan  
Bracket Mounting

**TWELVE-INCH AND SIXTEEN-INCH ALTERNATING AND DIRECT CURRENT DESK-BRACKET FANS**

The adaptability of the desk-bracket fan and the numerous ways in which it can be used have made it extremely popular. The ease of conversion from desk to bracket type without the use of a screwdriver or other tool is notable. The twelve-inch and sixteen-inch designs have swivel and trunnion mounting permitting the movement of the fan horizontally or vertically through a wide angle. Correct proportioning of the electrical design has permitted a considerable reduction in size and weight of the twelve-inch motors, hence they can be handled much more easily and transportation charges are correspondingly lessened.

**SPECIFICATIONS**

**ADJUSTMENT.** Combination hinge and swivel joint with trunnion mounting.

**SPEEDS.** Three operating speeds with "off" position.

**SWITCH.** Improved lever design with notched guide insuring positive setting for each speed.

**FINISH.** Motor body, yoke and base finished in lustrous black enamel. Double ring brass guard and four-blade brass fan dipped and lacquered.

**TWELVE-INCH  
FOR ALTERNATING CURRENT**

Cat. No.	Cycles	Volts	Watts at Fast Speed	Speed
*34267	25	110	60	1300
33594	40	120	75	1600
78715	50	100	55	1300
78716	50	110	55	1300
78717	50	200	55	1300
78718	50	220	55	1300
34017	60	110	50	1500
34018	60	220	50	1500
34019	133	110	90	1650

**FOR DIRECT CURRENT**

Cat. No.	Volts	Watts at Fast Speed	Speed
34003	110	47	1600
34004	220	47	1600

**SIXTEEN-INCH  
FOR ALTERNATING CURRENT**

Cat. No.	Cycles	Volts	Watts at Fast Speed	Speed
58294	25	110	95	1250
58295	40	120	135	1600
78719	50	100	85	1250
78720	50	110	85	1250
78721	50	200	85	1250
78722	50	220	85	1250
34021	60	110	85	1400
34022	60	220	85	1400
34023	133	110	145	1600

**FOR DIRECT CURRENT**

Cat. No.	Volts	Watts at Fast Speed	Speed
34005	110	80	1450
34006	220	80	1450

\* Built in series commutating type only.

Order by catalogue number.

For weights see page 33.

TWELVE-INCH AND SIXTEEN-INCH ALTERNATING AND DIRECT  
CURRENT OSCILLATING FANS



Twelve-Inch Oscillator  
Bracket Mounting



Twelve-Inch Oscillator



Sixteen-Inch Oscillator



Sixteen-Inch Oscillator  
Bracket Mounting

## TWELVE-INCH AND SIXTEEN-INCH ALTERNATING AND DIRECT CURRENT OSCILLATING FANS

The oscillating fan, as its name implies, provides a constantly changing distribution of air currents. It is essentially a desk-bracket type of fan with the addition of a few auxiliary devices for producing the oscillating movement.

### SPECIFICATIONS

**ADJUSTMENT.** Hinge joint and two-bearing ring support for motor body.

**SPEEDS.** Three operating speeds with "off" position.

**SWITCH.** Improved lever design with notched guide insuring positive setting for each speed.

**FINISH.** Motor body, supporting ring and base finished in lustrous black enamel.

Double ring brass guard and four-blade brass fan dipped and lacquered.

**NOTE.**—All oscillating fans are provided with handles to facilitate carrying.

### TWELVE-INCH

#### FOR ALTERNATING CURRENT

Cat. No.	Cycles	Volts	Watts at Fast Speed	Speed
*75433	25	110	65	1300
75431	40	120	85	1600
78727	50	100	60	1300
78734	50	110	60	1300
78735	50	200	60	1300
78736	50	220	60	1300
75423	60	110	55	1500
75424	60	220	55	1500
75427	133	110	95	1650

#### FOR DIRECT CURRENT

Cat. No.	Volts	Watts at Fast Speed	Speed
60559	110	50	1550
60560	220	50	1550

### SIXTEEN-INCH

#### FOR ALTERNATING CURRENT

Cat. No.	Cycles	Volts	Watts at Fast Speed	Speed
75434	25	110	100	1250
75432	40	120	140	1600
78737	50	100	90	1300
78738	50	110	90	1300
78739	50	200	90	1300
78740	50	220	90	1300
75425	60	110	90	1400
75426	60	220	90	1400
75429	133	110	160	1600

#### FOR DIRECT CURRENT

Cat. No.	Volts	Watts at Fast Speed	Speed
60561	110	85	1475
60562	220	85	1475

\* Built in series commutating type only.

Order by catalogue number.

For weights see page 33.

TWELVE-INCH AND SIXTEEN-INCH ALTERNATING AND DIRECT  
CURRENT RESIDENCE FANS



Twelve-Inch Residence Fan  
Desk-Bracket Type



Sixteen-Inch Residence Fan Oscillating  
Type, Bracket Mounting



Sixteen-Inch Residence Fan  
Desk-Bracket Type

**TWELVE-INCH AND SIXTEEN-INCH ALTERNATING AND DIRECT CURRENT RESIDENCE FANS**

The residence fan is designed for extreme quietness in running. It has a wide field of usefulness in hospitals, bedrooms, offices, theaters, libraries and similar places. Residence fans are furnished in the desk-bracket and oscillating types and differ from the corresponding standard designs heretofore described only in having a slow speed operating characteristic and a six-blade fan.

The sixteen-inch size is a new development and is offered to meet a growing demand for a fan combining quiet running with large total air disturbance.

**SPECIFICATIONS**

**ADJUSTMENT.** Combination hinge and swivel joint with trunnion mounting for desk-bracket type. Hinge joint and two-bearing ring support for oscillating type.

**SPEEDS.** Three operating speeds with "off" position.

**SWITCH.** Improved lever design with notched guide insuring positive setting for each speed.

**FINISH.** Motor body, yoke (desk-bracket type), ring (oscillating type) and base finished in lustrous black enamel. Double ring brass guard and four-blade brass fan dipped and lacquered.

**TWELVE-INCH  
FOR ALTERNATING CURRENT**

CAT. NO.		WATTS AT FAST SPEED				Desk- Bracket	Oscillating
Desk- Bracket	Oscillating	Cycles	Volts	Speed	Desk- Bracket	Oscillating	
76361	78771	25	110	1100	57	57	
76362	78772	40	120	1100	56	56	
78723	78773	50	100	1100	57	57	
78724	78774	50	110	1100	57	57	
78725	78775	50	200	1100	57	57	
78726	78776	50	220	1100	57	57	
76363	78777	60	110	1100	54	54	
76364	78778	60	220	1100	54	54	

**FOR DIRECT CURRENT**

78790	78788	..	110	1100	44	44
78791	78789	..	220	1100	44	44

**SIXTEEN-INCH  
FOR ALTERNATING CURRENT**

CAT. NO.		WATTS AT FAST SPEED				Desk- Bracket	Oscillating
Desk- Bracket	Oscillating	Cycles	Volts	Speed	Desk- Bracket	Oscillating	
146064	146073	25	110	1050	95	95	
146065	146074	40	120	1050	95	95	
146066	146075	50	100	1100	70	70	
146067	146076	50	110	1100	70	70	
146068	146077	50	200	1100	70	70	
146069	146078	50	220	1100	70	70	
146070	146079	60	110	1050	70	70	
146071	146080	60	220	1050	70	70	

**FOR DIRECT CURRENT**

146060	146062	..	110	1100	65	65
146061	146063	..	220	1100	65	65

Order by catalogue number.  
For weights see page 33.

## CEILING FANS

## ALTERNATING CURRENT

**T**HE General Electric alternating current ceiling fan motors are of the induction type and of the simplest construction. They have a deserved reputation for extreme durability. The revolving armature floats on a ball bearing, thus eliminating noise and greatly increasing the efficiency. The fan blades are direct connected to the rotor and permanently set at an angle that will move the largest volume of air with the least current consumption. The automatic lubricating system deserves special mention. Oil is inserted through an oil hole at the top of the motor and conducted to a reservoir at the top of the armature bearing, thence through a duct to the lower oil cup shown in the sectional illustration. The armature spider is provided with a groove which acts as a pump when the fan is in operation. By this means the oil is forced through the bearing into the reservoir at the top, returning through the duct or channel into the lower cup. This circulation continues so long as the motor is in operation. It will be observed that the ball races are immersed in oil at all times.

The 52-inch alternating current ceiling fan is furnished in the plain and ornamental types which differ only in the external casing, finish, speed regulation and hanger equipment.

The 32-inch alternating current ceiling fan is a new development and is designed for lighter service. In all essential characteristics, it is a miniature reproduction of the larger size. This small sweep fan is furnished only in the plain type.

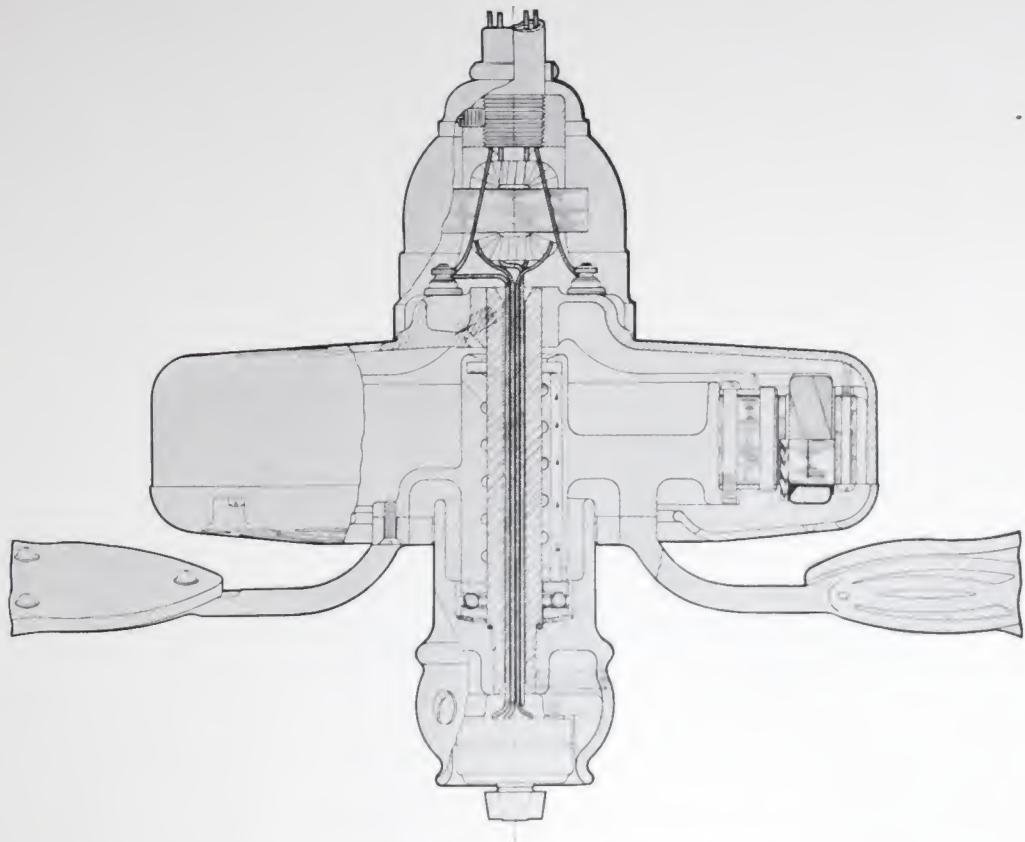
## DIRECT CURRENT

The direct current ceiling fan motors are the result of long experience in fan motor design and manufacture and can be ordered with the fullest confidence. Their operating characteristics are beyond criticism.

The 58-inch direct current ceiling fans are practically identical with those on the market last season. They have the same type of bearing and automatic lubricating device as that of the alternating current ceiling fans. The design is furnished in the plain and ornamental types.

The 56-inch direct current ceiling fan is of two-pole construction with bearings lubricated by grease cups. It is a highly successful fan and is offered to meet an urgent demand for one of low price. The design is less refined than that of the 58-inch fan, yet highly pleasing in effect. Its construction is solid and durable and it is built to last a lifetime. The motor is furnished only in the plain type.

The 32-inch direct current ceiling fan is a new development and is specially adapted to small rooms, hallways, etc. It is symmetrical in shape, small in diameter and very compact, making a neat and attractive appearance. The design employs a two-pole, laminated field structure with drum armature. The frame is totally enclosed, with brush-holders at the top. Lubrication is supplied by grease cups. The motor is essentially of the plain type, but lends itself admirably to a variety of special and ornate finishes.



Section of Fifty-Two-Inch Alternating Current Ceiling Fan

Alternating and direct current ceiling fans of all types are completely assembled and carefully tested on the proper current before they are packed for shipment. The fan blades which are made from a carefully selected grade of white wood are accurately balanced to insure a steadily operating motor. The 1914 line of ceiling fans contains fans for all conditions of service.

CEILING FANS FOR ALTERNATING CURRENT  
FIFTY-TWO-INCH SWEEP—PLAIN TYPE—TWO-SPEED



Fifty-Two-Inch Alternating Current Ceiling Fan  
Plain Type—Two-Speed



Fifty-Two-Inch Alternating Current Ceiling Fan  
Ornamental Type—Three-Speed

**CEILING FANS FOR ALTERNATING CURRENT  
FIFTY-TWO-INCH SWEEP—PLAIN TYPE—TWO-SPEED**

**FINISH.** Motor body finished in lustrous black enamel; bottom cover, blade flanges, switch support and canopies finished in streaked oxidized copper. Wooden blades finished in light mahogany.

Cat. No.	Cycles	Volts	Speeds
62364	25	110	175-225
62365	40	120	175-225
62366	50	105	150-200
62367	50	115	150-200
62368	50	220	150-200
46208	60	105	175-225
44986	60	115	175-225
44987	60	220	175-225

**ACCESSORIES.** Cat. Nos. include insulated hanger, ceiling canopy, ceiling hook with lag screw end and one set of four wooden blades.

**NOTE.**—Suspension pipe is not regularly furnished with this type of fan. If suspension pipe is desired,  $\frac{3}{4}$  inch plain japanned iron conduit, threaded at both ends, will be supplied at a moderate price. (See table on pages 33 and 40.)

**FIFTY-TWO-INCH SWEEP—ORNAMENTAL TYPE—THREE-SPEED**

**FINISH.** All metal parts, including rope tube casing for suspension pipe, finished in streaked oxidized copper. Wooden blades finished in light mahogany.

Cat. No.	Cycles	Volts	Speeds
62359	25	110	125-175-225
62360	40	120	125-175-225
62361	50	105	115-150-200
62362	50	115	115-150-200
62363	50	220	115-150-200
46209	60	105	125-175-225
44988	60	115	125-175-225
44989	60	220	125-175-225

**ACCESSORIES.** Cat. Nos. include insulated hanger, ceiling canopy, ceiling hook with lag screw end and one set of four wooden blades, also one length suspension pipe and one length rope-tube casing for it.

**NOTE.**—The suspension pipe supplied with the ornamental ceiling fans is composed of standard  $\frac{3}{4}$  inch plain iron conduit threaded at each end, with a covering of rope-tube casing. The overall dimension of motor and pipe assembled is approximately  $4\frac{1}{2}$  feet. When hung from a 12-foot ceiling the switch key is approximately  $7\frac{1}{2}$  feet from the floor. (See table on pages 33 and 40 for other lengths.)

Order by catalogue number.  
Dimensions, page 33; weights, page 33.

CEILING FANS FOR DIRECT CURRENT



Fifty-Eight-Inch Direct Current Ceiling Fan  
Plain Type—Single-Speed



Fifty-Eight-Inch Direct Current Ceiling Fan  
Ornamental Type—Single- or Three-Speed

**CEILING FANS FOR DIRECT CURRENT  
FIFTY-EIGHT-INCH SWEEP—PLAIN TYPE—SINGLE-SPEED**

**FINISH.** Body finished in lustrous black enamel. Bottom cover, blade flanges, switch-support and canopies finished in streaked oxidized copper. Wooden blades finished in light mahogany.

Cat. No.	Volts	Speed	Fast Speed
34007	110	200	120
34008	220	200	125

**ACCESSORIES.** Cat. Nos. include insulated hanger, ceiling canopy, ceiling hook with lag screw ends and one set of four wooden blades.

**NOTE.**—Suspension pipe is not regularly furnished with this type of fan. If it is desired  $\frac{3}{4}$  inch plain japanned iron conduit, threaded at both ends, will be supplied at a moderate price. (See table, pages 33 and 40.)

**FIFTY-EIGHT-INCH SWEEP—ORNAMENTAL TYPE  
SINGLE- AND THREE-SPEED**

**FINISH.** All metal parts, including rope-tube casing for suspension pipe, finished in streaked oxidized copper. Wooden blades finished in light mahogany.

SINGLE-SPEED			
Cat. No.	Volts	Speed	Watts at Fast Speed
37642	110	200	125
37643	220	200	125

THREE-SPEED			
Cat. No.	Volts	Speeds	Watts at Fast Speed
59433	110	100-150-200	125
59434	220	100-150-200	125

**ACCESSORIES.** Cat. Nos. include insulated hanger, ceiling canopy, ceiling hook with lag screw end and one set of four wooden blades. Also one length suspension pipe and one length rope tube casing for it.

**NOTE.**—The suspension pipe supplied with the ornamental ceiling fan, is composed of standard  $\frac{3}{4}$  inch plain iron conduit, with a covering of rope-tube casing. The overall dimension of motor and pipe, assembled, is approximately  $4\frac{1}{2}$  feet. When hung from a 12-foot ceiling the switch key is about  $7\frac{1}{2}$  feet from the floor. (See table on pages 33 and 40 for other lengths.)

Order by catalogue number.

Dimensions, page 32; weights, page 33.

CEILING FANS FOR ALTERNATING AND DIRECT CURRENT



Thirty-Two-inch Alternating Current Ceiling  
Fan—Two-Speed



Thirty-Two-inch Direct Current Ceiling  
Fan—Single-Speed



Fifty-Six-inch Direct Current Ceiling Fan—Single-Speed

CEILING FANS FOR ALTERNATING CURRENT  
THIRTY-TWO-INCH SWEEP—PLAIN TYPE—TWO-SPEED

Cat. No.	Cycles	Volts	Speeds	Watts at Fast Speed
146230	25	110	300-200	85
146231	40	120	350-250	85
146232	50	105	300-200	85
146233	50	115	300-200	85
146234	50	220	300-200	85
146235	60	105	350-250	85
146236	60	115	350-250	85
146237	60	220	350-250	85

FOR DIRECT CURRENT  
THIRTY-TWO-INCH SWEEP—PLAIN TYPE—SINGLE-SPEED

Cat. No.	Volts	Speed	Watts at Fast Speed
146210	110	350	75
146211	220	350	75

## FIFTY-SIX-INCH SWEEP—PLAIN TYPE—SINGLE SPEED

Cat. No.	Volts	Speed	Watts at Fast Speed
79820	110	225	130
79821	220	225	130

The following pertains to all motors listed above.

**FINISH.** All metal parts including ceiling canopy finished in lustrous black enamel. Wooden blades finished in light mahogany.

**ACCESSORIES.** Cat. Nos. include insulated hanger, ceiling canopy, ceiling hook with lag screw end, and one set of four wooden blades.

**NOTE.**—Suspension pipe is not regularly furnished with these types of fans. If suspension pipe is desired,  $\frac{1}{2}$  inch (for 32-inch motor) or  $\frac{3}{4}$  inch (for 56-inch motor) plain japanned iron conduit, threaded at both ends will be supplied at a moderate price. (See table on pages 33 and 40.)

Order by catalogue number.

Dimensions, page 32; weights, page 33.

ELECTROLIER ATTACHMENTS



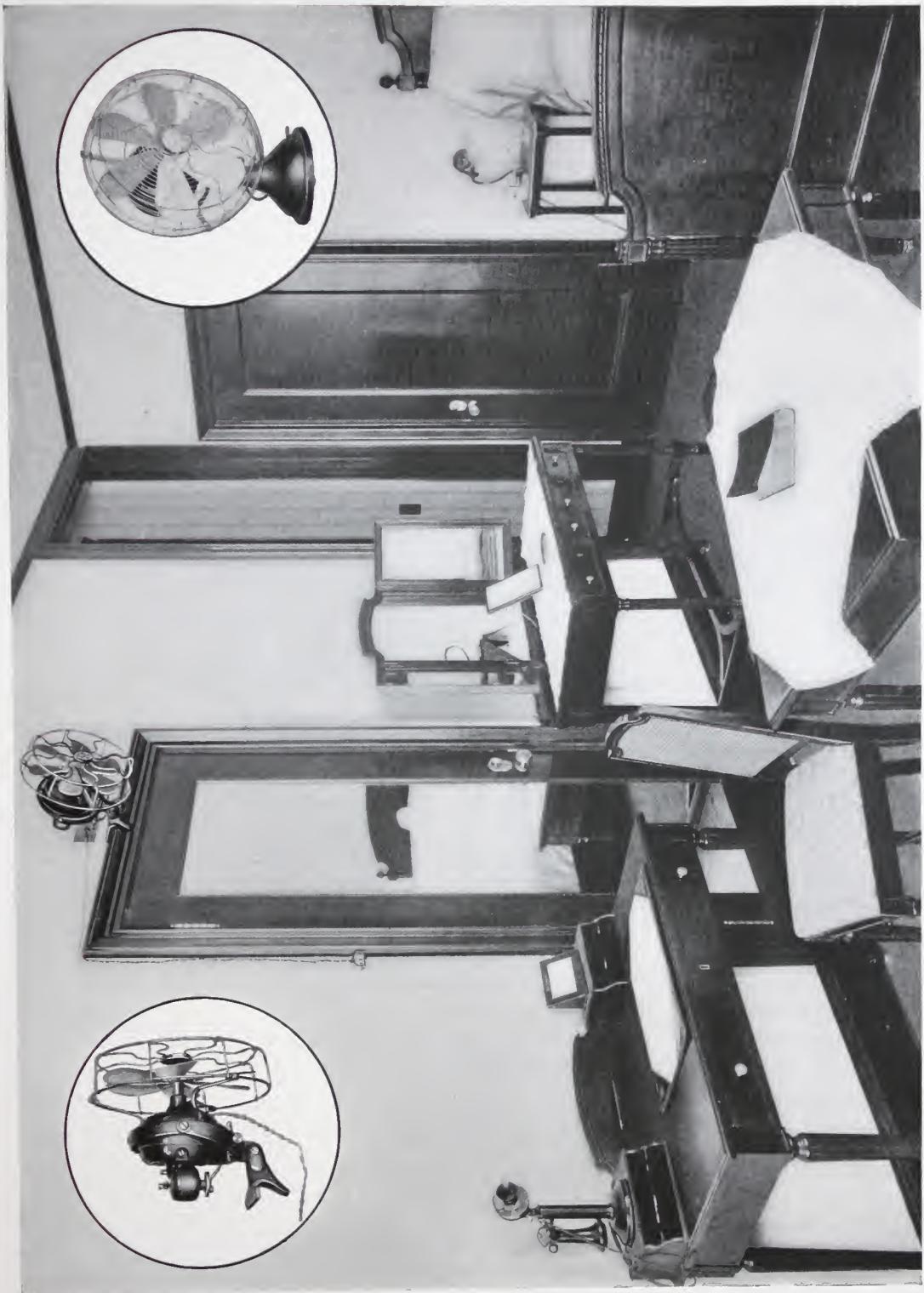
Fifty-Eight-Inch Direct Current Ceiling Fan  
with Electrolier Attachment



Fifty-Two-Inch Alternating Current Ceiling Fan  
with Electrolier Attachment

See page 30.

G E N E R A L      E L E C T R I C      C O M P A N Y



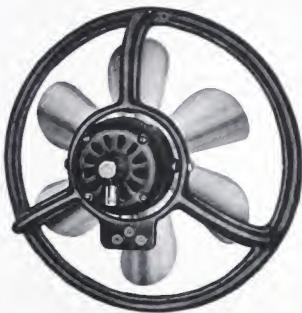
Special Mounting for Door and Window Casing and Protective Guard for Hotels and Residences

## SMALL VENTILATING OUTFITS

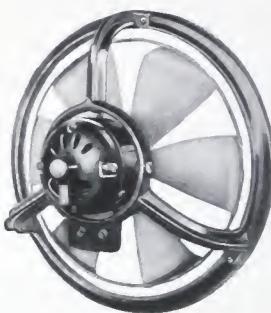


MECHANICAL ventilation has long since been recognized as an essential adjunct to comfort. Dependence on natural draft for the removal of hot air, gases, dust, odors, etc., is not reliable because of extraneous influences. To meet the demand for a small ventilating outfit at a minimum cost, the General Electric Company offers the serviceable designs as here illustrated. To obtain the best results, it is essential that the fan exhaust directly into open spaces and not against wind or other back pressure. All intake or exhaust pipes should be avoided so far as possible. The G-E type of blade is recommended where there is no back pressure while the High Pressure type of blade should be employed in case of a short flue, and wherever the outfit is fastened to a light partition or bulk-head.

These ventilating outfits find a ready market in small industrial establishments, restaurants, grill rooms, kitchens, laboratories, lavatories, vaults and similar places.



Alternating Current Fan with  
General Electric Type Blades



Direct Current Fan with High  
Pressure Type Blades



Front View Showing High  
Pressure Type Blades

#### TWELVE-INCH AND SIXTEEN-INCH ALTERNATING AND DIRECT CURRENT EXHAUST FANS

**FINISH.** Motor body and supporting ring finished in lustrous black enamel. General Electric type blades furnished in dipped and lacquered brass. High Pressure type blades finished in black japan.

#### ALTERNATING CURRENT OUTFITS

CAT. NO.	12-Inch	16-Inch	Volts	Cycles	SPEED		WATTS AT FAST SPEED	
					12-Inch	16-Inch	12-Inch	16-Inch
*35307	58298	110	25	1700	1500	1600	60	75
35308	*58299	120	40	1700	1600	1700	80	150
104231	104235	100	50	1300	1250	1300	65	80
104232	104236	110	50	1300	1250	1300	65	80
104233	104237	200	50	1300	1250	1300	65	80
104234	104238	220	50	1300	1250	1300	65	80
34025	34029	110	60	1500	1450	1500	65	95
34026	34030	220	60	1500	1450	1500	65	95

**NOTE.**—Catalogue number includes motor complete with 6-blade fan and supporting ring together with a separate starting box with which is combined a three-speed controller. The starting box is essential to the satisfactory operation of the motor.

\* Built in series commutating type only.

**TWELVE-INCH AND SIXTEEN-INCH ALTERNATING AND DIRECT  
CURRENT EXHAUST FANS**

**DIRECT CURRENT OUTFITS**

CAT. NO.	16-Inch	Volts	SPEED		WATTS AT FAST SPEED	
			12-Inch	16-Inch	12-Inch	16-Inch
12-Inch	16-Inch	Volts	12-Inch	16-Inch	12-Inch	16-Inch
34009	34011	110	1600	1550	65	120
34010	34012	220	1600	1550	65	120

NOTE.—Catalogue numbers include motor complete with 6-blade fan and supporting ring. Starting box or speed controller are not included since neither is essential to the satisfactory operation of the motor. A speed controller designed for separate wall mounting can be furnished if desired.

**SPEED CONTROLLERS  
FOR DIRECT CURRENT OUTFITS**

Cat. No.	For Fan Size in Inches	Volts		
			12	220
34034	12	110		
34035	12	220		
34036	16	110		
34037	16	220		

NOTE.—These controllers are finished in lustrous black enamel. Connections to motor are clearly indicated in diagram pasted to the back of each controller box.

Order by catalogue number.

Dimensions, page 32; weights and packing data, page 33.

**EXHAUST FANS**

The exhaust fans listed above may be readily adapted to ceiling mounting by a slight modification of the rear bearing. A simple form of step bearing is provided which insures proper lubrication and consequently long life.

Some manufacturers recommend the standard exhaust fan for ceiling mounting; this, however, is not considered good policy by the General Electric Company. The slight additional cost of the step bearing is greatly offset by more satisfactory and economical operation and also by increased life of the wearing parts.

Exhaust fans for service with shaft in positions other than horizontal are special and will be built to order.

High Pressure type of blades are interchangeable with the G-E type of blade and the same catalogue numbers will apply. Unless specified on the order the G-E type of blade will be furnished.

## TWELVE-INCH AND SIXTEEN-INCH DIRECT CURRENT NAVY FANS



HE Navy fan is a new development and especially designed to meet all conditions of service and operation as imposed by the Government specifications (17-A-3). The fan is arranged for vertical or horizontal mounting with an adjustable axis of revolution. Bearings are self-aligning and self-lubricating. A suitable starting and regulating switch with non-absorbent mounting is located in the base or pedestal. The fans are thoroughly moisture-proof, while all fittings are non-corrosive.



Direct Current Twelve-Inch Fan



Direct Current Sixteen-Inch Fan

## SPECIFICATIONS

**ADJUSTMENT.** Combination hinge and swivel joint with trunnion mounting.

**SPEEDS.** Three operating speeds with "off" position.

**SWITCH.** Improved lever design with notched guide insuring positive setting for each speed.

**FINISH.** Motor body, yoke and base finished in lustrous black enamel. Double ring brass guard and four-blade brass fan dipped and lacquered.

## TWELVE-INCH DESK-BRACKET TYPE

Cat. No.	Volts
150395	80-125
150396	220

Order by catalogue number.

## SIXTEEN-INCH DESK-BRACKET TYPE

Cat. No.	Volts
150397	80-125
150398	220

## GENERAL INFORMATION

## FAN APPLICATIONS



HE sixteen-inch fan is designed particularly for service in large rooms, stores, restaurants, etc., where a high velocity discharge is the most effective. It should never be selected for residence use or for places where a powerful fan with attendant noise is objectionable.

The twelve-inch fan is designed for rooms and enclosures of medium size where a moderately strong air velocity is desirable. Noise is reduced to a degree consistent with general operating characteristics, and a well diffused breeze.

The eight-inch fan operates with remarkable quietness and provides an alternative for those places where the strong breezes from the larger fans are objectionable. They are extremely popular in the home and on the desk in the private office.

The ceiling fan is universally employed in locations where it is desirable to remove a very large volume of air at a moderate velocity. They are suitable for large offices, stores, restaurants and theaters.

## SPECIAL FINISHES

All modern and thoroughly progressive hotels and restaurants, stores, offices, show-rooms, etc., demand fan motors finished to harmonize with their elaborately appointed interiors, and also to match hardware finishes, etc. To meet the exacting requirements of the trade, the General Electric Company has provided space and modern equipments to facilitate the execution of such orders. Prices for fans in special finishes are named only on receipt of full specifications as to types and quantities of fans desired. If practicable samples of finish desired should be submitted with the inquiry or order. It must be recognized that certain parts of the General Electric fans are of cast iron and it is difficult to procure by electro-plate, the exact results in finish which can be procured by similar process on brass. When placing orders for specially finished ceiling fans, care should be taken to specify the desired finish of the wooden blades. Otherwise the blades will be finished to harmonize with the metal parts; that is, with brass, nickel, or other light finishes, blades of natural wood filled and varnished, while with motors of darker finishes blades stained in mahogany will be supplied.

The popular electro-plates and colored enamels are listed below.

## ELECTRO-PLATES

Brush brass  
Antique or old brass  
Sanded oxide brass  
Bronze plate  
Oxidized bronze  
Statuary bronze  
Butler silver  
Verde antique  
Gun metal  
Streaked oxidized copper  
Nickel  
Rose gold

## COLORED ENAMELS

Brush brass	Antique copper	Pompeian verde
Royal blue	Mahogany bronze	Moss green
Electro bronze	Statuary bronze	French bronze
Satin green	Antique silver	Green bronze
Antique verde	Cinnamon bronze	Old ivory
Aluminum	Pompeian bronze	Chocolate brown
Mosaic gray	Silver oak	Yellow brass
Roman gold	Dark copper	Egg shell white
White and gold	Japanese bronze	Oxidized brass
Light mahogany	Red granite	Rose gold
Black oxidize	Marine black	Gilt
Old brass	French antique	

## GROUP INSTALLATION

Formerly the desk-bracket and ceiling fans were used singly or in small groups, whereas now many modern office buildings, hotels, restaurants, etc., are equipped with fans throughout, installations of from 200 to 500 being not uncommon.

The adaptability of the General Electric fans to all conditions of service and to a variety of special mountings places them in a unique and enviable position.

## GENERAL INFORMATION

## GROUP INSTALLATION—Continued

Recognizing the growing tendency toward large group installations and with eagerness to assist in the selection of the fan best suited to local conditions, the General Electric Company has stationed fan motor specialists in various parts of the country whose duties are to advise and aid in this new field for development. Trained engineers are also available who will make personal investigations and furnish recommendations and quotations in connection with any new propositions.

## BLADES FOR CEILING FANS

The ceiling fans unless otherwise ordered are arranged for a downward discharge of air. When so ordered the blades can be furnished for upward discharge. This is a great advantage in meat markets and places where a downward discharge might disturb papers, as in offices and banks. Fans arranged for upward discharge are not carried in stock but are supplied on special order without extra charge.

## EXTENSION SWITCH KEY FOR CEILING FANS

In certain installations it is found desirable to suspend the ceiling fan with blades eight to ten feet from the floor to accommodate electrolier attachments or for the purpose of securing a wider distribution of air without the powerful direct draught. This places the key to the control switch out of reach and would ordinarily involve the installation of some form of side wall control.

In order to avoid all special wiring the General Electric Company offers an extension key which consists of a small rod cut to any convenient length supplied with coupling at one end and a knurled knob or thumb nut at the other.

This extension can be readily attached to the switch stud in place of the key regularly furnished. The knob for convenience should be located approximately seven feet from the floor.

## ELECTROLIER ATTACHMENTS

The lower portion of the ceiling fan is particularly well adapted to receive electrolier attachments. Excellent schemes of lighting may be worked out in a manner as suggested. (See page 24.)

Electrolier attachments in all cases are mounted below the blades so as to avoid shadows. They are furnished only on special order, and at an increase in price. They will be packed with fans on request, but fans cannot be shipped with brackets attached. Electrolier brackets for two- and four-light clusters may be readily attached to the thirty-two-inch and fifty-two inch alternating current fans, also to the fifty-eight-inch direct current fans.

A special adapting casting, lead tube and special assembly are necessary to attach electrolier attachments to the thirty-two-inch and fifty-six-inch direct current fans. This work should preferably be done at the factory. Catalogue numbers assigned to ceiling fan motors do not include sockets or any other electrolier fittings.

## COLUMN FANS

Column fans for floor or counter installation may be furnished to special order. They are of the same general construction as the corresponding ceiling fan, the only difference being such changes as are necessary to adapt the fan to column mounting.

## SPECIAL FAN MOTORS

The list of fan motors given on previous pages of this catalogue includes a rating for the usual commercial circuits. Special fan motors can be furnished for other frequencies within the range twenty-five to one hundred and forty, and for voltages twenty-five to two hundred and fifty, except in the case of the ceiling fan which is not recommended for frequencies exceeding sixty. All special fan motors are necessarily built to order and subject to attending details in production.

## GENERAL INFORMATION

## RANGE OF VOLTAGES AND FREQUENCIES

All alternating current fans listed will operate satisfactorily over a range of 5 per cent above or below normal voltage or frequency. The sum of the variation in voltage and frequency must not exceed 5 per cent.

All direct current fans listed will operate satisfactorily over a range of 10 per cent above or below normal voltages.

All motors are guaranteed to start positively on low speed point under extreme circuit conditions as indicated above and with fan tilted fully forward or backward.

Ceiling fans for 60 cycle circuits may be operated on 50 cycle circuits, the energy consumed and speed being decreased proportionately.

## LUBRICATION

The wick feed oil cups employed by the eight-inch, twelve-inch and sixteen-inch alternating current and direct current desk-bracket fans, also by the thirty-two-inch and fifty-six-inch ceiling fans, are filled with lubricant when the fans are shipped and require attention about once a season. When the cups require replenishing, a high grade non-fluid grease of light consistency is recommended.

The thirty-two-inch, fifty-two-inch alternating current and fifty-eight-inch direct current ceiling fans require a supply of fluid oil immediately after they are installed. An oil can filled with the correct amount of oil for one season's run, is shipped with each motor. It is important that the full contents of this can be supplied to the motor before operating. If, however, after running the motor a short time, it becomes noisy, add a little more oil, being careful not to overflow the cup. A light grade of cylinder oil is recommended. Acid, or vegetable oil, must never be used, since they will either pit the bearings or clog the passages.

It is important that oiling be given careful attention at the start, as it is impossible to make a fan motor run smoothly without proper lubrication.

## RENEWABLE PARTS

An accurate record is kept of each and every fan motor shipped by the General Electric Company so that by quoting serial number which is clearly stamped upon the name plate, a fan motor construction may be immediately identified, and duplicated if necessary. Thus it will be seen that all wearing parts may be readily renewed at nominal expense and without returning the fan to the factory. Customers cannot be too careful in quoting serial numbers, and because of carelessness in this connection it is suggested that the type of motor and complete rating be named when ordering supply parts.

## ATTACHING CORD AND PLUG

Catalogue numbers do not include cord and plug. When attaching cord and plug are desired the order should so specify. Suitable wiring devices are listed on pages 40 and 41.

## CAUTION

Hang the ceiling fan from a solid ceiling with the hanger hook securely imbedded in the timber or beam. This is important for two reasons; first, for safety, as the ceiling fan has considerable weight and second, to prevent vibration and noise due to lack of firm supports.

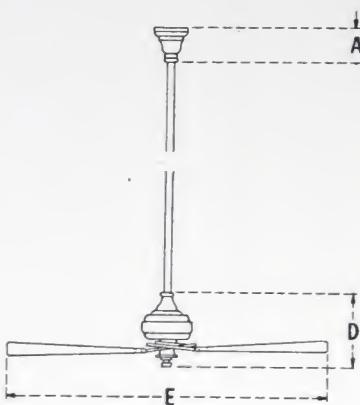
Never take a fan motor apart unless absolutely necessary, as it is undesirable to break the joints and connections.

Connect the motor to a circuit having approximately the same voltage and frequency as that stamped on the name plate.

Inspect the motor from time to time, see that all screws are securely in place, and turn the blades by hand to make sure they are perfectly free.

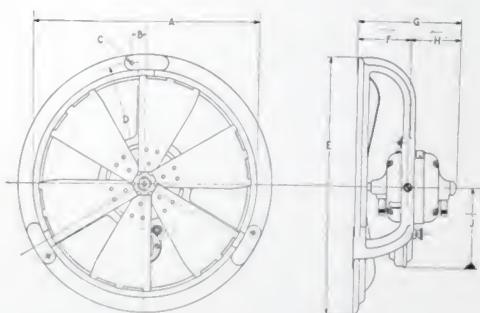
## DIMENSIONS

## CEILING FANS



	A	D	E	
Alternating Current	$\left\{ \begin{array}{l} 32 \\ 52 \end{array} \right.$	$\left\{ \begin{array}{l} 5 \\ 5\frac{5}{8} \end{array} \right.$	$\left\{ \begin{array}{l} 10\frac{1}{2} \\ 13 \end{array} \right.$	$\left\{ \begin{array}{l} 32 \\ 52 \end{array} \right.$
Direct Current	$\left\{ \begin{array}{l} 32 \\ 56 \\ 58 \end{array} \right.$	$\left\{ \begin{array}{l} 5 \\ 5\frac{5}{8} \\ 5\frac{5}{8} \end{array} \right.$	$\left\{ \begin{array}{l} 8\frac{3}{4} \\ 12\frac{5}{8} \\ 12\frac{3}{8} \end{array} \right.$	$\left\{ \begin{array}{l} 32 \\ 56 \\ 58 \end{array} \right.$

## EXHAUST FANS



	A	B	C	D	E	F	G	H	J
Alternating Current	$\left\{ \begin{array}{l} 12 \\ 16 \end{array} \right.$	$\left\{ \begin{array}{l} 13\frac{3}{8} \\ 17\frac{3}{8} \end{array} \right.$	$\left\{ \begin{array}{l} 1\frac{1}{8} \\ 1\frac{1}{8} \end{array} \right.$	$\left\{ \begin{array}{l} \frac{1}{4} \\ \frac{1}{4} \end{array} \right.$	$\left\{ \begin{array}{l} 7\frac{1}{4} \\ 9\frac{1}{4} \end{array} \right.$	$\left\{ \begin{array}{l} 15\frac{5}{8} \\ 19\frac{5}{8} \end{array} \right.$	$\left\{ \begin{array}{l} 3\frac{5}{8} \\ 4\frac{3}{2} \end{array} \right.$	$\left\{ \begin{array}{l} 7 \\ 7\frac{3}{4} \end{array} \right.$	$\left\{ \begin{array}{l} 3\frac{3}{8} \\ 3\frac{3}{2} \end{array} \right.$
Direct Current	$\left\{ \begin{array}{l} 12 \\ 16 \end{array} \right.$	$\left\{ \begin{array}{l} 13\frac{3}{8} \\ 17\frac{3}{8} \end{array} \right.$	$\left\{ \begin{array}{l} 1\frac{1}{8} \\ 1\frac{1}{8} \end{array} \right.$	$\left\{ \begin{array}{l} \frac{1}{4} \\ \frac{1}{4} \end{array} \right.$	$\left\{ \begin{array}{l} 7\frac{1}{4} \\ 9\frac{1}{4} \end{array} \right.$	$\left\{ \begin{array}{l} 15\frac{5}{8} \\ 19\frac{5}{8} \end{array} \right.$	$\left\{ \begin{array}{l} 3\frac{5}{8} \\ 4\frac{3}{2} \end{array} \right.$	$\left\{ \begin{array}{l} 7\frac{7}{8} \\ 7\frac{3}{4} \end{array} \right.$	$\left\{ \begin{array}{l} 3\frac{1}{2} \\ 3\frac{3}{2} \end{array} \right.$

## WEIGHTS

ALL FANS ARE SECURELY BRACED IN STRONG WOODEN BOXES

Size	Type	APPROX. WT. LB.	
		Net	Shipping
8-Inch	Desk-Bracket	{ AC 6½ DC 5	13½ 12
	Oscillator	{ AC 7½ DC 7	15 13½
	Telephone Booth	{ AC 6½ DC 5	13½ 12
	Desk-Bracket	{ AC 16½ DC 14½	34 35
12-Inch	Oscillator	{ AC 18 DC 15	36 35
	Residence	{ Desk-Bracket Oscillator	{ AC 18½ DC 15½
	Exhaust	{ G-E type blades High Pressure type blades	{ AC 30 DC 25 AC 31 DC 26 AC 26 AC 29 DC 28
	Desk-bracket	{ AC 26½ DC 25	44 43
16-Inch	Oscillator	{ AC 26½ DC 25½	45 44
	Residence	{ Desk-Bracket Oscillator	{ AC 29½ DC 28½
	Exhaust	{ G-E type blades High Pressure type blades	{ AC 36 DC 33 AC 37½ DC 34½
	Ceiling	{ AC 30 DC 24	49 45
32-Inch	Ceiling	{ AC 55 AC 62	100 105
52-Inch	Ceiling	{ Plain Ornamental	{ DC 49 DC 48
56-Inch	Ceiling	{ Plain	78
58-Inch	Ceiling	{ Ornamental	80
			DC 54
			85

## LENGTH OF IRON PIPE FOR CEILING FANS

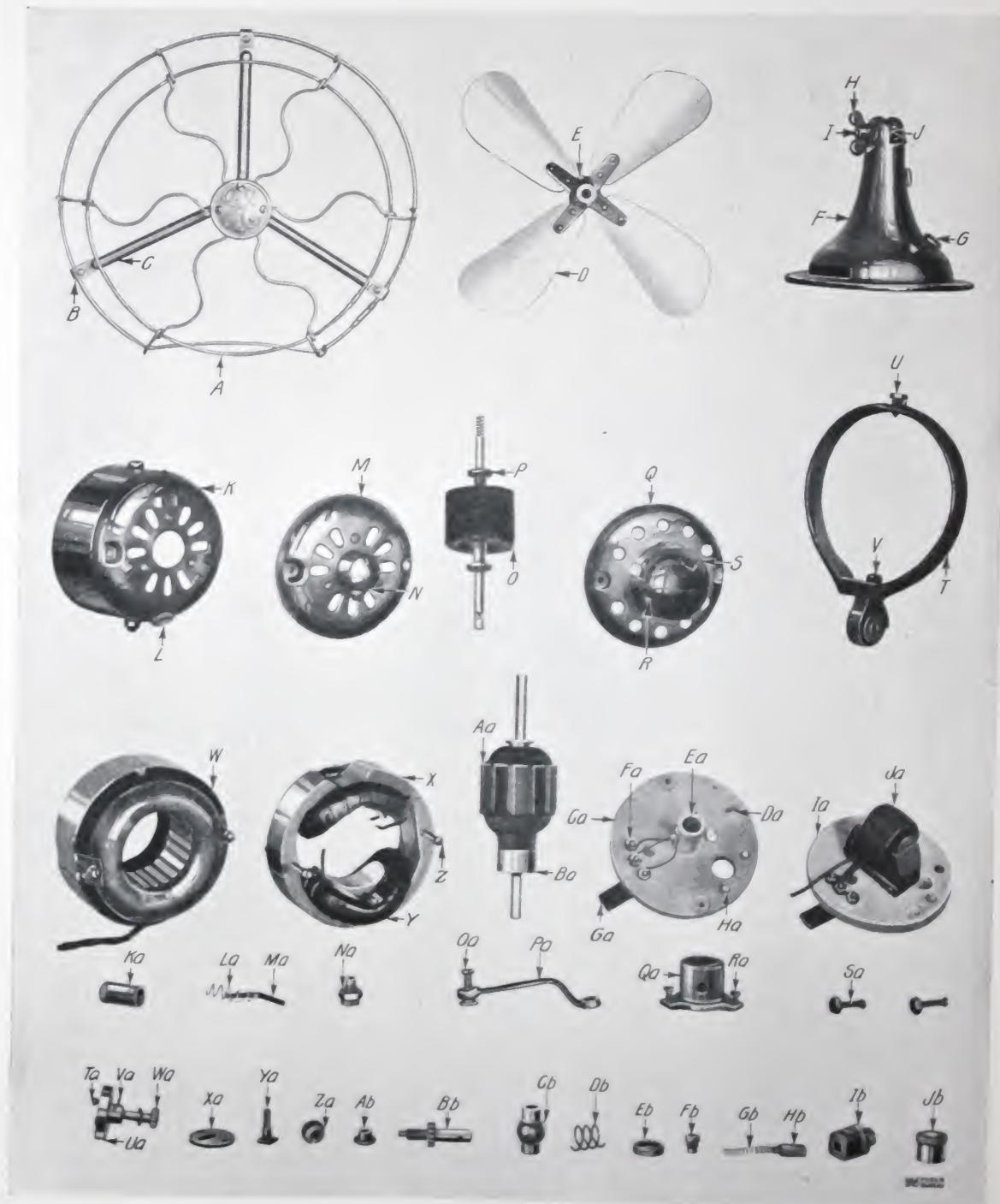
Height of Ceiling	LENGTH OF PIPE—OVER THREADED ENDS	
	For 32-Inch AC and DC	For 52-Inch AC and 56-Inch—58-Inch DC
8 ft. 6 in.	nipple	3 in.
9 ft.	nipple	9 in.
9 ft. 6 in.	3 in.	1 ft. 3 in.
10 ft.	9 in.	1 ft. 9 in.
10 ft. 6 in.	1 ft. 3 in.	2 ft. 3 in.
11 ft.	1 ft. 9 in.	2 ft. 9 in.
11 ft. 6 in.	2 ft. 3 in.	3 ft. 3 in.
12 ft.	2 ft. 9 in.	3 ft. 9 in.
12 ft. 6 in.	3 ft. 3 in.	4 ft. 3 in.
13 ft.	3 ft. 9 in.	4 ft. 9 in.
13 ft. 6 in.	4 ft. 3 in.	5 ft. 3 in.
14 ft.	4 ft. 9 in.	5 ft. 9 in.
14 ft. 6 in.	5 ft. 3 in.	6 ft. 3 in.
15 ft.	5 ft. 9 in.	6 ft. 9 in.
15 ft. 6 in.	6 ft. 3 in.	7 ft. 3 in.
16 ft.	6 ft. 9 in.	7 ft. 9 in.
16 ft. 6 in.	7 ft. 3 in.	8 ft. 3 in.
17 ft.	7 ft. 9 in.	8 ft. 9 in.
17 ft. 6 in.	8 ft. 3 in.	9 ft. 3 in.
18 ft.	8 ft. 9 in.	9 ft. 9 in.

When the lengths above specified are used the 52-inch, 56-inch and 58-inch fans will hang approximately 7 ft. 6 in. from the floor, while the 32-inch fans will hang approximately 8 ft. 6 in. from the floor.

The length of the suspension pipe for the 32-inch fan is shortened to give a close ceiling mounting, thus securing a wider and less forceful distribution of air.

NOTE—The 52-inch, 56-inch and 58-inch ceiling fans require  $\frac{3}{4}$  inch iron pipe while the 32-inch fans require  $\frac{1}{2}$  inch pipe.

SUPPLY PARTS FOR ALTERNATING AND DIRECT CURRENT EIGHT-INCH  
DESK-BRACKET AND OSCILLATING FANS



SUPPLY PARTS FOR ALTERNATING AND DIRECT CURRENT EIGHT-INCH  
DESK-BRACKET AND OSCILLATING FANS

In ordering give name of part, reference letter and serial number of motor

	List Price		List Price
A Fan guard complete . . . . .	\$1.25	†Aa Armature complete, direct current	
B Guard clamp and screw . . . . per 100	.50	110 volts . . . . .	\$5.00
C Guard support with screw . . . . per 100	5.75	220 volts . . . . .	7.00
D Fan complete . . . . .	.75	Ba Commutator . . . . .	.90
E Set screw for fan . . . . . per 100	2.50	Ca Regulating switch complete with resistance unit, direct current . . . . .	.90
F Base with bushing . . . . .	1.25	Da Switch contact plate, alternating current or direct current . . . . per 100	1.75
G Soft rubber bushing for base . . . . per 100	2.50	Ea Resistance unit for direct current motor . . . . .	.25
H Thumbnut for hinge bolt . . . . .	.15	Fa Switch contact plug with nut and washer alternating or direct current per set . . . . .	.08
I Hinge bolt . . . . . per 100	5.25	Ga Switch lever . . . . .	.08
J Washer for hinge bolt . . . . . per 100	2.00	Ha Binding post with nut and washer, alternating or direct current . . . . .	.08
†K Frame		Ia Regulating switch complete with coil, alternating current . . . . .	1.60
Alternating current desk . . . . .	1.00	Ja Regulating coil only, alternating current . . . . .	.95
Alternating current oscillator . . . . .	1.00	Ka Oil cup . . . . .	.08
Direct current desk . . . . .	1.00	La Oil wick spring . . . . .	.02
Direct current oscillator . . . . .	1.00	Ma Oil wick . . . . .	.02
L Rubber bushing for frame . . . . per 100	2.25	Na Oil wick collar and sleeve . . . . .	.05
M Cap with bearing complete		Oa Screw and sleeve for connecting rod . . . . .	.03
Alternating current . . . . .	1.40	Pa Connecting rod . . . . .	.45
Direct current . . . . .	1.75	Qa Bearing . . . . .	.35
N Monogram cap for rear bearing . . . . .	.03	Ra Screw for bearing and guard support per 100 . . . . .	.50
*O Armature complete, alternating current . . . . .	2.00	Sa Screw and spacing nut for base per 100 . . . . .	2.00
P Armature shaft washer . . . . per 100	.35	Ta Screw for crank disk sliding base per 100 . . . . .	.35
Q Oscillator cap complete with oscillator and gear case		Ua Crank disk for oscillating mechanism . . . . .	.25
Alternating current . . . . .	3.85	Va Pinion for crank disk . . . . .	.50
Direct current . . . . .	4.00	Wa Worm wheel . . . . .	.20
R Bearing for worm wheel shaft . . . . .	.05	Xa Crank disk plate . . . . .	.05
S Oscillating gear case cap . . . . .	.40	Ya Crank pin . . . . per 100 . . . . .	.75
T Oscillating ring . . . . .	2.80	Za Thumb bolt for crank pin . . . . .	.03
U Pivot screw for oscillating ring . . . . .	.03	Ab Bearing sleeve for crank pin . . . . .	.03
V Lower pivot . . . . .	.03	Bb Worm shaft and wheel . . . . .	.08
†W Field complete for alternating current motors		Cb Bearing lining . . . . .	.15
60 cycle 110 volts . . . . .	7.50	Db Bearing spring . . . . per 100 . . . . .	2.00
60 cycle 220 volts . . . . .	10.50	Eb Bearing nut . . . . per 100 . . . . .	2.00
40 cycle 120 volts . . . . .	8.00	Fb Bearing pivot for oscillator . . . . .	.03
25 cycle 110 volts . . . . .	8.50	Gb Brush spring . . . . .	.03
†X Field complete for direct current motors		Hb Brush . . . . .	.10
110 volts . . . . .	3.50	Ib Brush tube complete . . . . .	.35
220 volts . . . . .	5.50	Jb Brush-holder cap . . . . .	.15
†Y Field coil for direct current			
110 volts . . . . per set	2.00		
220 volts . . . . per set	4.50		
Z Screw for motor cap, alternating current or direct current . . . . per 100	.50		

\* State desk or oscillator.

† State rating and serial number of motor.

SUPPLY PARTS FOR ALTERNATING AND DIRECT CURRENT TWELVE- AND  
SIXTEEN-INCH DESK-BRACKET AND OSCILLATING FANS



## SUPPLY PARTS FOR ALTERNATING AND DIRECT CURRENT TWELVE- AND SIXTEEN-INCH DESK-BRACKET AND OSCILLATING FANS

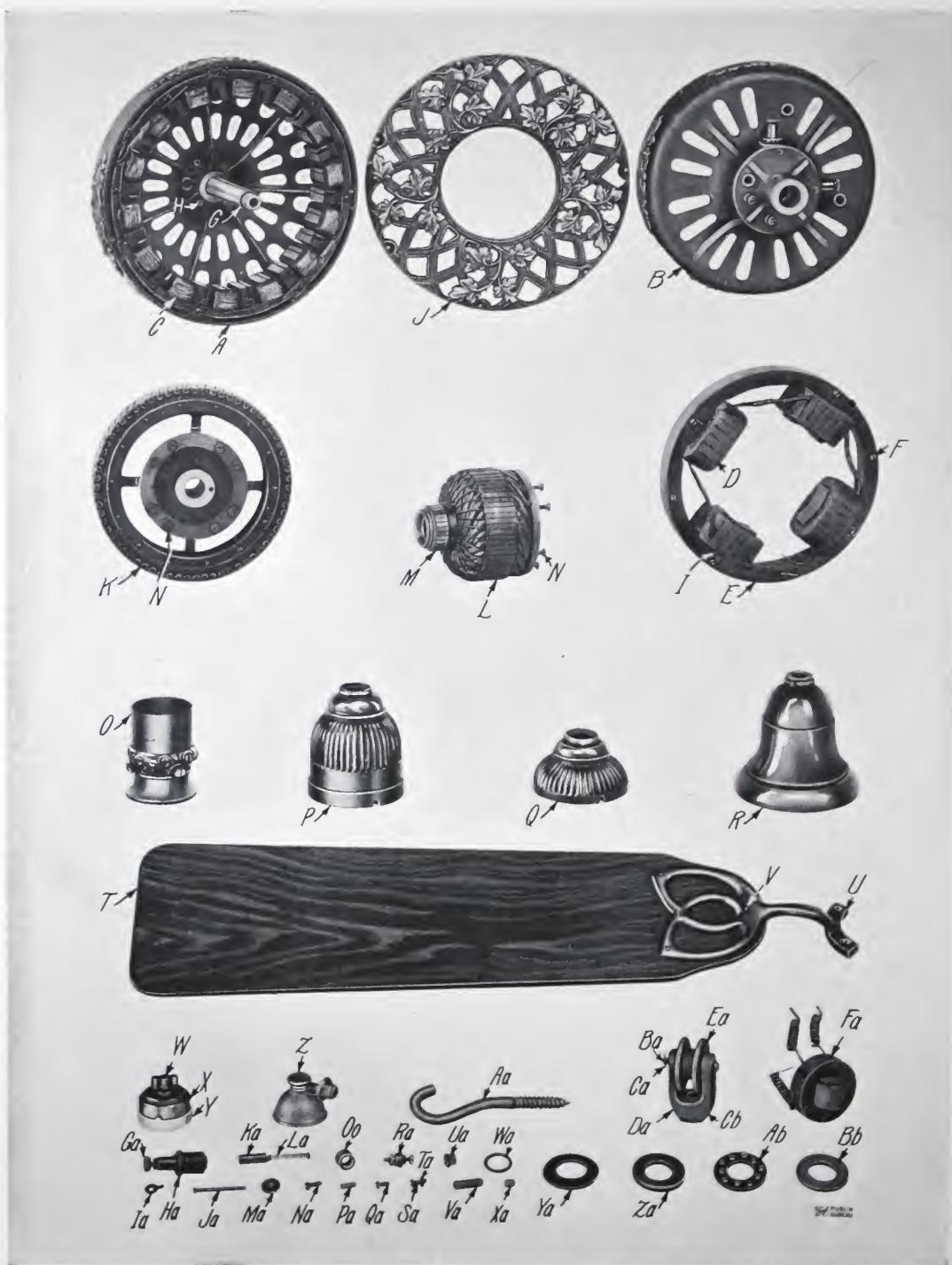
In ordering give name of part, reference letter and serial number of motor

		List Price		List Price			
*A	Fan guard complete						
	12-inch	\$2.00	Ia	Switch ratchet			
	16-inch	3.00	Ja	Switch blade			
*B	Guard clamping screw	per 100	1.00	Ka	Switch contact plate		
*C	Guard support with clips			La	Support for resistance unit		
	12-inch	per set	.30	Ma	Switch blade pivot		
	16-inch	per set	.50	†Na	Regulating coil, alternating current motor		
*D	Fan complete with set screw (4 blade)			Oa	Screw for regulating coil		
	12-inch	1.50	Pa	Nut for regulating coil			
	16-inch	2.00	Qa	Spacing sleeve for regulating coil screw			
*E	Fan complete with set screw (6 blade)				per 100	2.00	
	12-inch	2.00	*Ra	Fiber base plate		.10	
	16-inch	2.50	†Sa	Field coil for direct current motor			
F	Set screw for fan				12-inch 110 volts	per set	2.75
†G	Motor frame				220 volts	per set	4.00
	12- and 16-inch alternating current	3.00			16-inch 110 volts	per set	3.25
	12-inch direct current	3.00			220 volts	per set	4.25
	16-inch direct current	3.75	Ta	Oscillating gear case		2.10	
H	Trunnion screw			Ua	Gear case screw	per 100	.75
I	Guard support screw			*Va	Field wedge, direct current	per 100	1.75
J	Armature shaft washer			*Wa	Connecting rod		.50
*K	Armature complete for alternating current			Xa	Spring pin complete for trunnion adjustment		.20
	motors	3.00	Ya	Cap nut for field stud		.04	
L	Swivel stud			Za	Clamping nut for field stud	per 100	.60
M	Swivel stud clamping screw			Ab	Field stud	per 100	1.75
N	Soft rubber bushing for field leads per 100	2.50	Bb	Crank disk screw	per 100	3.50	
O	Soft rubber bushing for attaching cord		Cb	Crank disk		.50	
	per 100	2.50	Db	Crank disk shaft		.10	
P	Soft rubber foot for base		Eb	Main gear		.75	
*Q	Base with screws and bushing		Fb	Operating lever		.20	
	12-inch	2.10	Gb	Worm wheel		.75	
	16-inch	2.50	Hb	Idler		.20	
R	Swivel stud set screw	.02	Ib	Worm gear shaft		.10	
†S	Armature complete for direct current motors		Jb	Screw for operating lever	per 100	.75	
	12-inch 110 volts	5.00	Kb	Brush-holder complete	per set	1.00	
	220 volts	5.50	Lb	Brush-holder field terminal nut	per 100	1.75	
	16-inch 110 volts	5.50	Mb	Brush-holder cap		.15	
	220 volts	6.50	Nb	Worm		.20	
T	Commutator	1.00	Ob	Set screw for worm		.03	
U	Armature shaft washer		Pb	Oil cup		.10	
†V	Motor cap { alternating current	per 100	Qb	Bearing lining		.20	
	direct current	1.35	Rb	Screw for motor cap, direct current	per 100	.75	
W	Cap monogram		Sb	Oil filler for rear operating bearing		.04	
*X	Field complete for alternating current motors		Tb	Steel ball lock for operating lever	per 100	.35	
	12-inch 60 cycle 110 volts	7.50	Ub	Binding post for switch base		.08	
	60 cycle 220 volts	8.50	Vb	Switch contact nut	per 100	1.00	
	40 cycle 120 volts	8.00	Wb	Rear bearing oil collar for oscillator		.04	
	25 cycle 110 volts	9.00	Xb	Oil wick collar		.04	
	16-inch 60 cycle 110 volts	8.50	Yb	Under pivot for motor body	per 100	1.75	
	60 cycle 220 volts	9.50	Zb	Oil wick	per 100	3.00	
	40 cycle 120 volts	9.00	Ae	Oil wick spring	per 100	2.00	
	25 cycle 110 volts	9.50	Be	Top pivot set screw	per 100	2.00	
Y	Yoke for motors except oscillating	1.00	Ce	Brush		.15	
Z	Thumbscrew for yoke and frame	.10	Dc	Brush spring		.02	
Aa	Thumbscrew for yoke and base	.10	Ec	Field terminal screw for switch base		.04	
Ba	Yoke for oscillating motors	1.50	Fc	Switch contact plug with nut and washers		.04	
Ca	Yoke ring pivot screw	.03	Gc	Bearing ring	per 100	1.50	
Da	Yoke ring for oscillator	2.50	Hc	Bearing clamp	per 100	3.00	
Ea	Screw pin for connecting rod	.03	Ic	Crank disk pin	per 100	.75	
Fa	Bottom pivot bearing	.03	Je	Main gear pin	per 100	1.50	
Ga	Regulating switch less coil	.80	Kc	Washer for operating lever	per 100	.35	
†Ha	Resistance unit for direct current motors		Lc	Ratchet for oscillator		.25	
	12-inch 110 volts	.35	Mc	Ratchet pin	per 100	1.75	
	220 volts	.35	Nc	Washer for idler screw	per 100	.35	
	16-inch 110 volts	.35	Oc	Idler screw		.04	
	220 volts	.35	Pc	Base plate screw	per 100	.35	

\* State size twelve- or sixteen-inch.

† State rating and serial number of motor.

SUPPLY PARTS FOR ALTERNATING AND DIRECT CURRENT  
CEILING FANS



SUPPLY PARTS FOR ALTERNATING AND DIRECT CURRENT  
CEILING FANS

In ordering give name of part, reference letter and serial number of motor

		LIST PRICE	Plain	Ornamental			List Price
*A	Frame complete with field	\$19.50	\$23.50		Z	Oil can	\$.15
	*Frame only	6.50	8.00		Aa	Hanger hook	.08
†B	Frame	5.50	7.00		Ba	Hanger pin	.05
*C	Single field coil	.35			Ca	Spring cotter for hanger pin	.50
†D	Single field coil	1.50			Da	Hanger complete	.65
†E	Field complete { 105 v. with coils 220 v.	9.00			Ea	Hanger insulator	.04
†F	Screw for field	per 100	.75		Fa	Regulator coil	1.50
G	Shaft		1.15		Ga	Brush-holder cap	.08
H	Set screw for shaft	per 100	1.75		Ha	Brush-holder complete	.50
I	Coil clamp	per 100	.75		Ia	Lead clip	per 100 1.75
J	Cover—direct current		1.50		Ja	Screw for regulator coil	per 100 .65
	Cover—alternating current		1.75		Ka	Brush	.15
*K	Armature		11.00		La	Brush spring	per 100 1.75
†L	Armature complete { 105 v. with commutator 220 v.	19.00			Ma	Binding post washer	per 100 2.50
M	Commutator		2.50		Na	Cover screw	per 100 .35
N	Blade-holder screw	per 100	.50		Oa	Soft rubber bushing	per 100 1.50
O	Switch support		1.00		Pa	Brush-holder set screw	per 100 3.50
*P	Motor canopy		.75		Qa	Lower canopy screw	per 100 1.75
†Q	Motor canopy		.50		Ra	Binding post complete	.30
R	Ceiling canopy		1.15		Sa	Switch screw	per 100 .50
S	Set screw for ceiling canopy	per 100	1.75		Ta	Switch screw washer	per 100 1.50
T	Blade		.75		Ua	Screw plug	.08
U	Blade-holder		.55		Va	Set screw for switch support	.05
V	Blade screw	per 100	.50		Wa	Lead washer for shaft and switch support	
W	Switch key		.06				per 100 1.50
X	Switch cover		.08		Xa	Set screw for suspension	per 100 3.50
†Y	Cat. No. 62410		.50		Ya	Leather washer for bearing	per 100 3.00
	Cat. No. 62411		.82		Za	Upper bearing washer	.55
	Cat. No. 62412		.82		Ab	Ball bearing	.30
					Bb	Lower bearing washer	.55
					Cb	Set screw for hanger	per 100 1.75

\* For alternating current motor.

† For direct current motor.

‡ Switch complete.

§ For ornamental motors.

## ADJUSTABLE SUSPENSIONS FOR ORNAMENTAL TYPE CEILING FANS

Style	Height of Ceiling	Length of Hanger
A	10 to 11 ft.	19 to 28 in.
B	10½ to 12 ft.	24 to 40 in.
C	12 to 15 ft.	42 to 76 in.
D	15 to 18 ft.	60 to 112 in.

The suspensions specified above for various ceiling heights may be adjusted so that the switch handle of the motor will be approximately 7 ft. 6 in. from the floor. Adjustable suspensions will be furnished only when specified on the order and at an extra price. Special hooks for conduit boxes and fixture studs will be furnished at an extra price.

## WIRING DEVICES

The utility and convenience of electric fans may be greatly increased by the use of proper outlets and attaching plugs.

The General Electric Company manufactures a complete line of such devices, pleasing in appearance and thoroughly reliable. The following are some of the more important devices:



Cat. No. 36817



Cat. No. 49490

## REMOVABLE FLUSH WALL RECEPTACLE

This device is furnished in four parts—box, receptacle, plate and plug. The box is permanently installed in the wall or base-board, the receptacle is inserted and the plate screwed in place. If desired, the receptacle can be pulled out and a G-E

removable switch mechanism substituted, making a double-pole or three-way flush, push-button switch, the plate being the same for both receptacle and switch. The plug is fastened to the wire lead of the fan or other portable, and can be inserted in or removed from the receptacle at will.

## DOUBLE DOOR FLUSH WALL RECEPTACLE

When installed in the wall or base-board only the small porcelain flange of the plug is visible. Two perfectly fitting doors in the plate open when the plug to which the fan lead is attached, is removed, and are closed after the plug is inserted. The principal advantage of this type of receptacle is that the plug when in place is flush with the wall.



Cat. No. GE286



Cat. No. 49487

## MISCELLANEOUS RECEPTACLES

The accompanying illustrations show two other types of G-E flush receptacles and plate for use with them. Cat. No. 36817 takes any standard attaching plug while Cat. No. 49490 is used with G-E standard separable caps, similar to Cat. No. 49487. These caps are furnished in porcelain, black moulded material and moulded material with brass cover.

## MISCELLANEOUS RECEPTACLES (Continued)



Cleat, Cat. No. 49488

Concealed  
Cat. No. 49489Miniature  
Swivel Plug  
Cat. No. GE002

Cat. No. 59805

When any of the above receptacles are to be mounted on white woodwork, white G-E enameled plates are recommended. The enamel finish on these plates will not chip, crack or turn yellow with age.

For use in office buildings and places where appearance is not such an important feature, the surface type of separable receptacle may be used. These devices are cheaper than the flush type and are neat and inconspicuous. They are furnished for cleat, moulding and concealed work and for use in conduit boxes. All take the same caps as Cat. No. 49490.

Conduit Box  
Cat. No. GE700Moulding  
Cat. No. GE064Miniature  
Separable Plug  
Cat. No. GE062MINIATURE SWIVEL AND MINIATURE  
SEPARABLE ATTACHING PLUGS

Both of these plugs are ideal for use with electric fans. The miniature swivel plug may be screwed into a socket or receptacle without any twisting of the cord. The screw shell and ring swivels freely, allowing the plug body, to which the lead is attached, to remain stationary. The miniature separable plug embodies another method of preventing the cord from twisting. After the plug body is screwed into a socket the separable cap is inserted.

COMBINED SOCKET AND SEPARABLE  
ATTACHING PLUG

Conditions sometimes arise in installing electric fans where the number of outlets is only such as is actually needed for the lamps in use. In such cases the device shown in the accompanying illustration is recommended. With this device the lamps can be used in the receptacle and the electric fan attached or detached independently of the lamp.

# GENERAL ELECTRIC COMPANY

PRINCIPAL OFFICES, SCHENECTADY, N. Y.

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Columbus, Ohio	Columbus Savings & Trust Building
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Keokuk, Iowa	Bank & Trust Building
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Los Angeles, Cal.	Starks Building
Louisville, Ky.	Fort Wayne Works
Madison, Wis.	Randolph Building
Memphis, Tenn.	Public Service Building
Milwaukee, Wis.	410 Third Ave., North
Minneapolis, Minn.	Stahlman Building
Nashville, Tenn.	Second National Bank Building
New Haven, Conn.	Maison-Blanche Building
New Orleans, La.	30 Church Street
New York, N. Y.	Gluck Building
Niagara Falls, N. Y.	Union Pacific Building
Omaha, Neb.	Witherspoon Building
Philadelphia, Pa.	Oliver Building
Pittsburg, Pa.	Electric Building
Portland, Ore.	Union Trust Building
Providence, R. I.	Virginia Railway & Power Building
Richmond, Va.	Granite Building
Rochester, N. Y.	Pierce Building
St. Louis, Mo.	Newhouse Building
Salt Lake City, Utah	Rialto Building
San Francisco, Cal.	Colman Building
Seattle, Wash.	Paulsen Building
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Springfield, Mass.	Onondaga County Savings Bank Building
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